

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 19958 - L2 Version 1
Chandra X-Ray Center

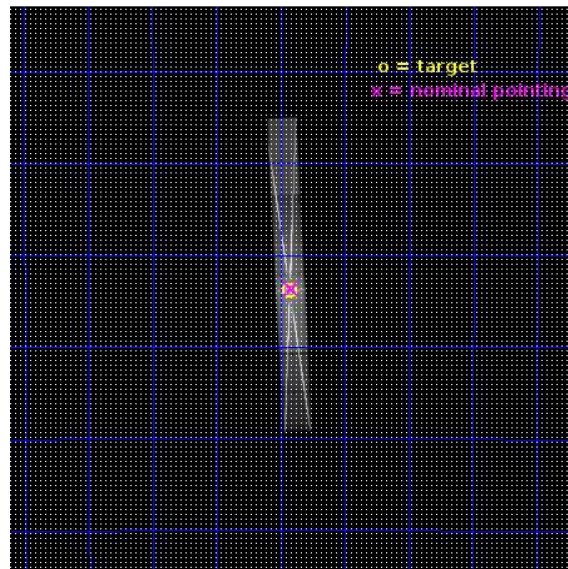
L2 Processing Date : May 22 2017

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1 Front

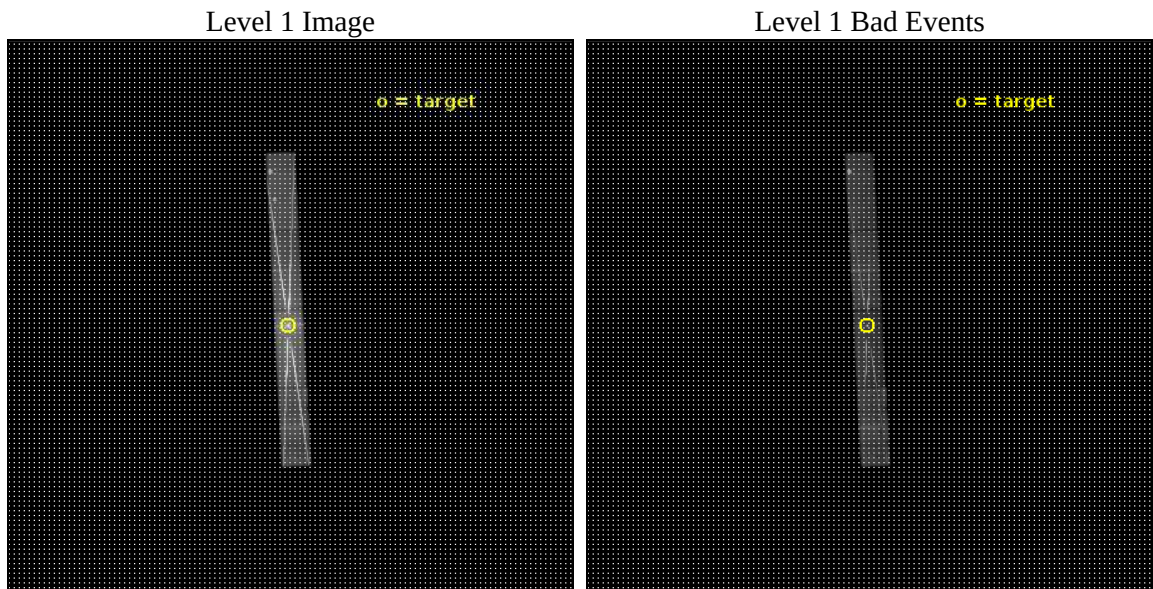
seq_num	901341	Sequence number
obs_id	19958	Observation id
title	Detect Broad High Z Lines in GX 3+1	Proposal title
observer	Claude Canizares	Principal investigator
object	GX 3+1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.983333	Observer's specified target RA [deg]
dec_targ	-26.5635	Observer's specified target Dec [deg]
ra_nom	266.97967419894	Nominal RA [deg]
dec_nom	-26.560804350939	Nominal Dec [deg]
roll_nom	87.154991186014	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30079.20119524	Sum of GTIs [s]
livetime	29084.510921717	Livetime [s]
ontime5	30079.20119524	Sum of GTIs [s]
ontime6	30079.194059968	Sum of GTIs [s]
ontime7	30079.20119524	Sum of GTIs [s]
ontime8	30079.153020024	Sum of GTIs [s]
l2events	2514198	Number of level 2 events



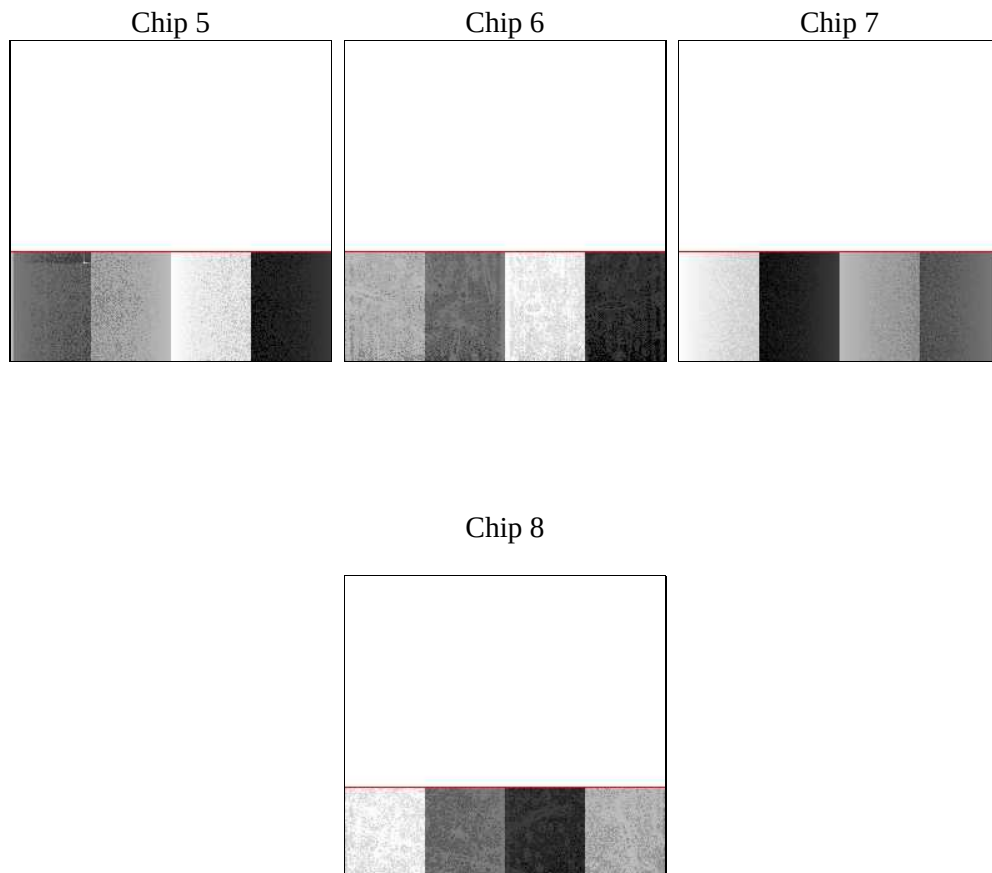
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	30079.20119524	Sum of GTIs [s]
caldsver	4.7.4	 	ontime5	30079.20119524	Sum of GTIs [s]
date	2017-05-22T04:20:36	Date and time of file creation	ontime6	30079.194059968	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	30079.20119524	Sum of GTIs [s]
			ontime8	30079.153020024	Sum of GTIs [s]
			l1events	2998437	Number of level 1 events
			tgmethod	FINDZO	Method used to create src1a file
			zo_pos	(4069.74, 4075.38)	src1a sky pixel position
			zo_pos_tgd	(4070.86, 4076.11)	src1a sky pixel position via radetect

2.1.4 Events

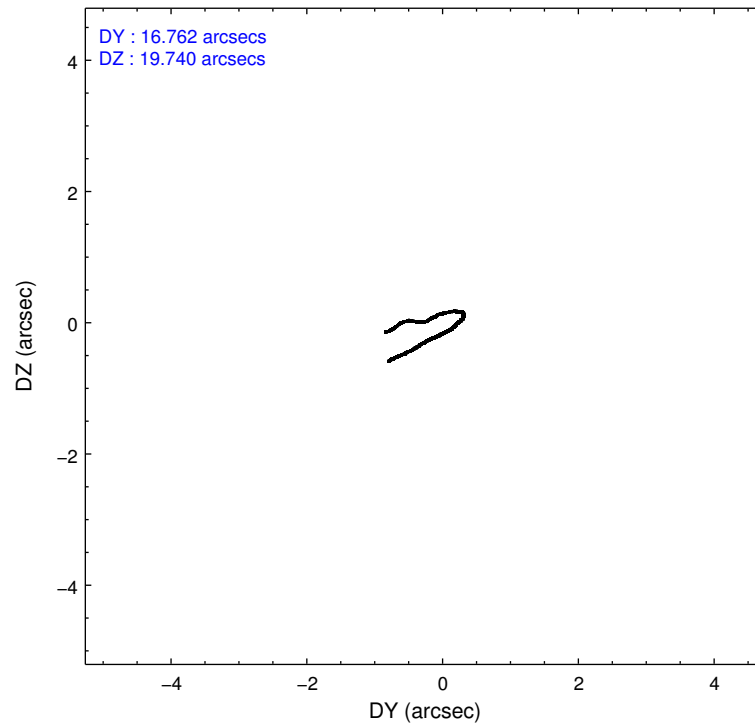
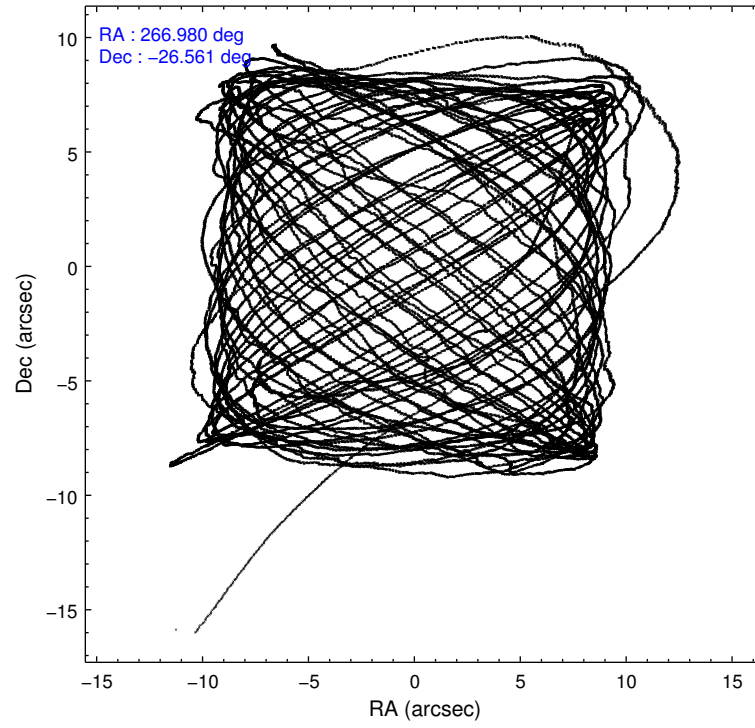
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	246621	1041740	1381225	328851
rejected events	75855	100656	110650	81970
rejected %	30%	9%	8%	24%

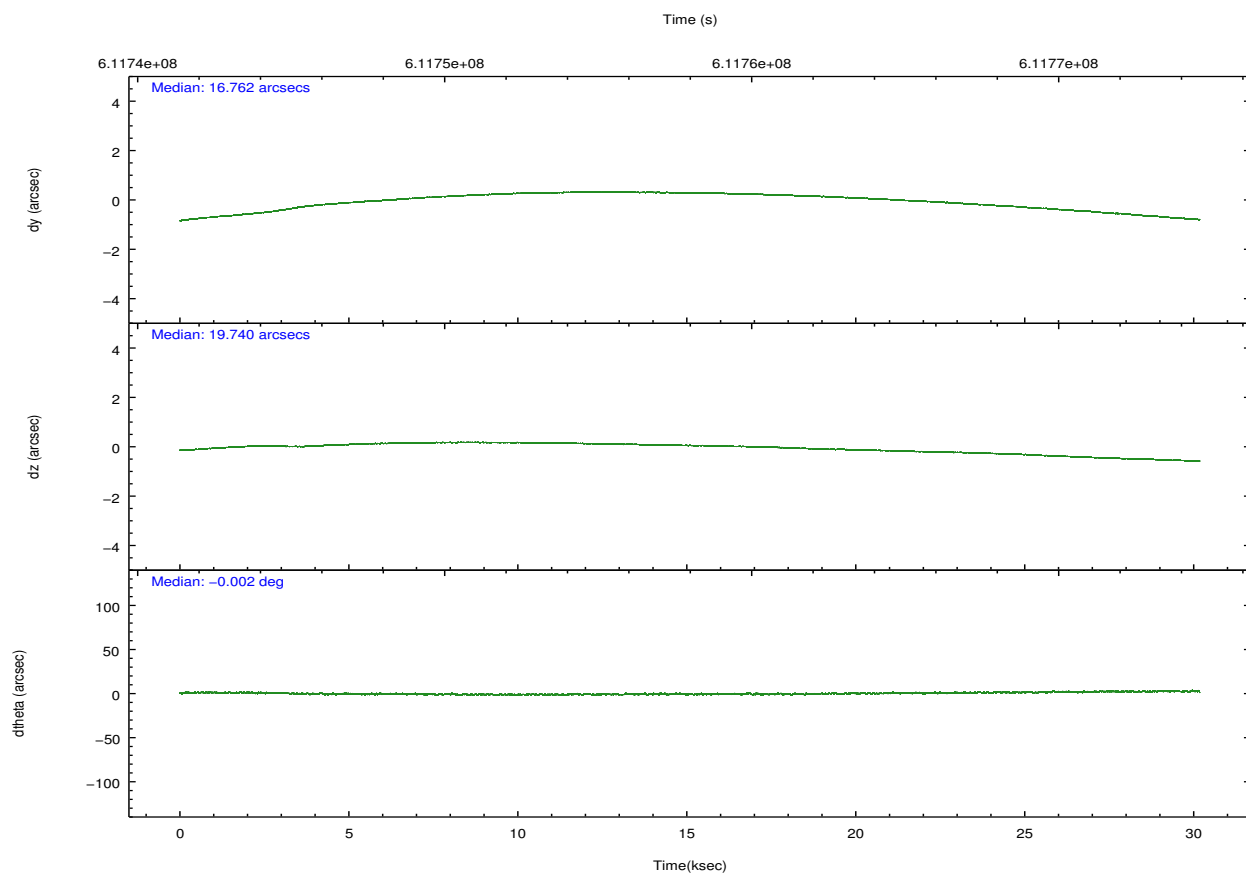
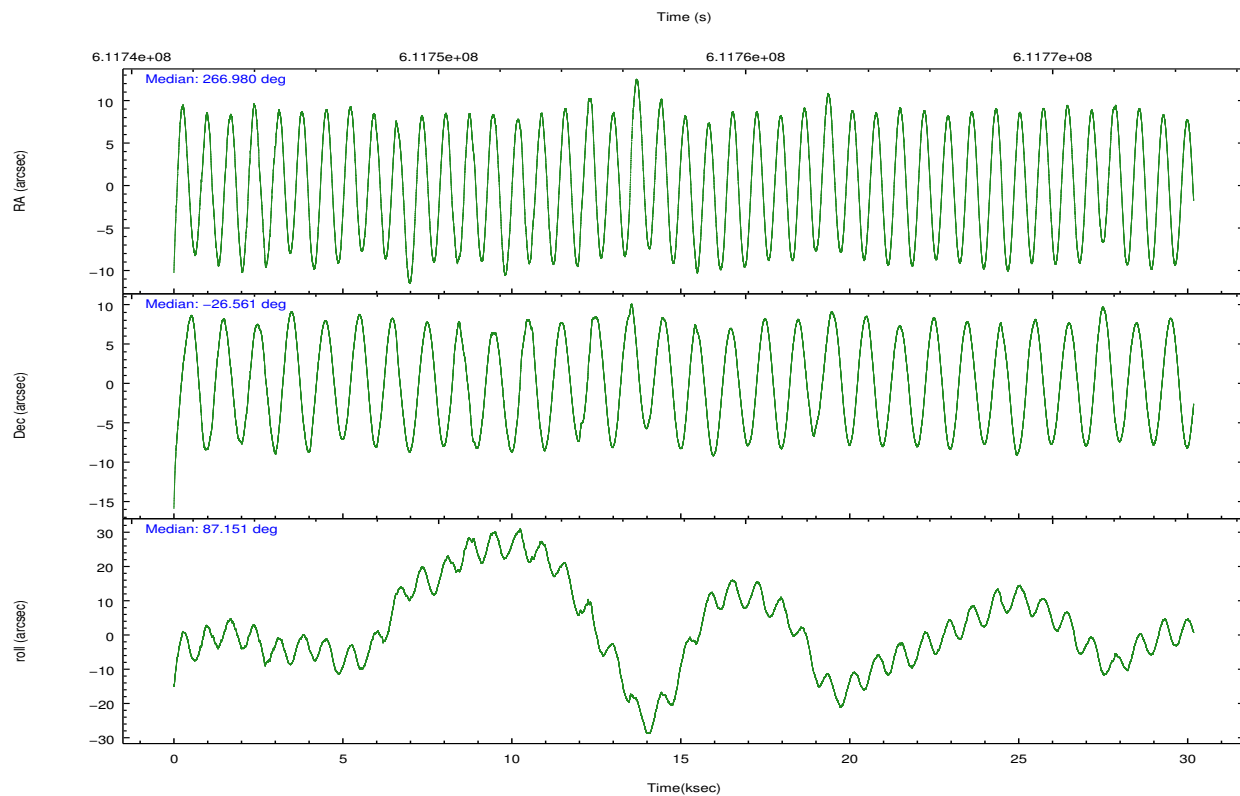
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	45473	669413	241051	177679
	18%	64%	17%	54%
grade 1 events	289	10017	5182	941
	0%	0%	0%	0%
grade 2 events	51083	127344	308878	31206
	20%	12%	22%	9%
grade 3 events	13335	44553	134542	11703
	5%	4%	9%	3%
grade 4 events	11996	44091	133834	11350
	4%	4%	9%	3%
grade 5 events	17438	12172	32932	5634
	7%	1%	2%	1%
grade 6 events	48894	55752	452374	14963
	19%	5%	32%	4%
grade 7 events	58113	78398	72432	75375
	23%	7%	5%	22%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.994036	266.9796741989383	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-26.585045	-26.56080435093889	Subarray start row	1	1
[deg] Pointing Roll	87.004789	87.15499118601352	Subarray row count	350	350
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.2
[mm] SIM translation stage pos	-182.132523	-182.1370004450064			
[mm] SIM translation stage offset	-8	-7.995522138001405			
[s] Observation start time (MET)	611743072.184000	611741923.2167799			
Observation start date	2017-05-21T08:36:43	2017-05-21T08:18:43			
[s] Observation end time (MET)	611773072.184000	611773978.5561399			
Observation end date	2017-05-21T16:56:43	2017-05-21T17:12:58			
Read mode	TIMED	TIMED			

2.3 Aspect



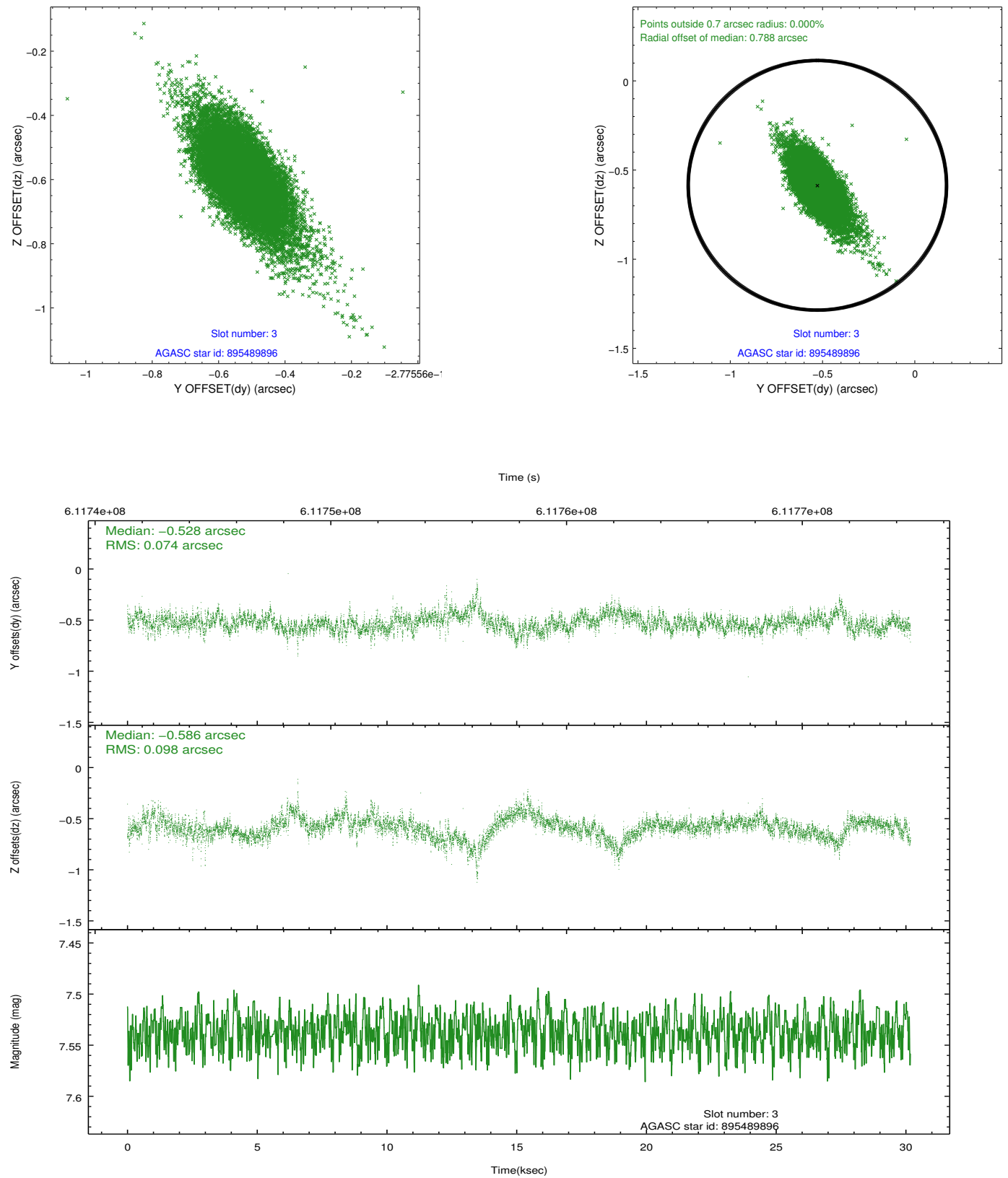


Slot Statistics

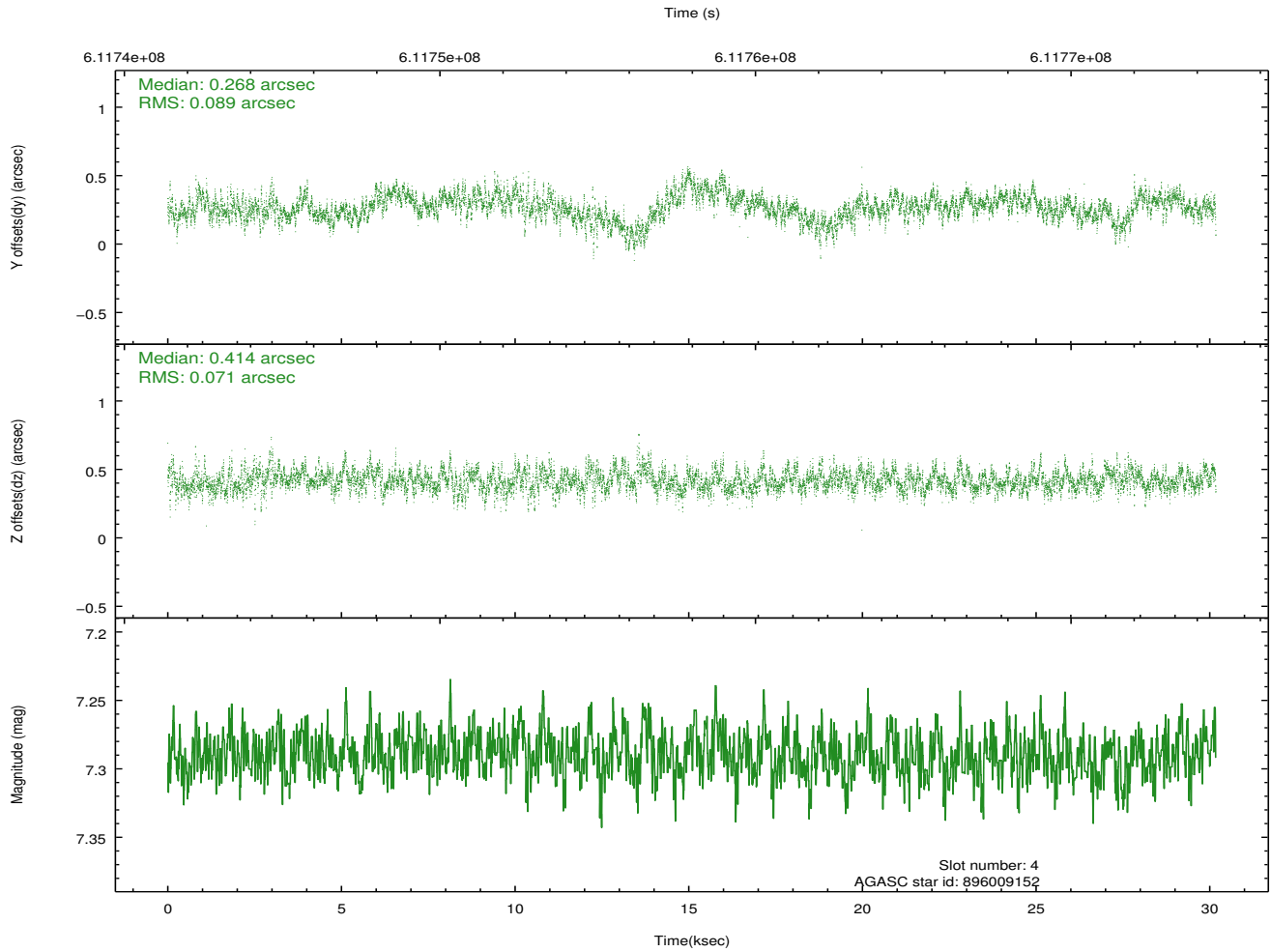
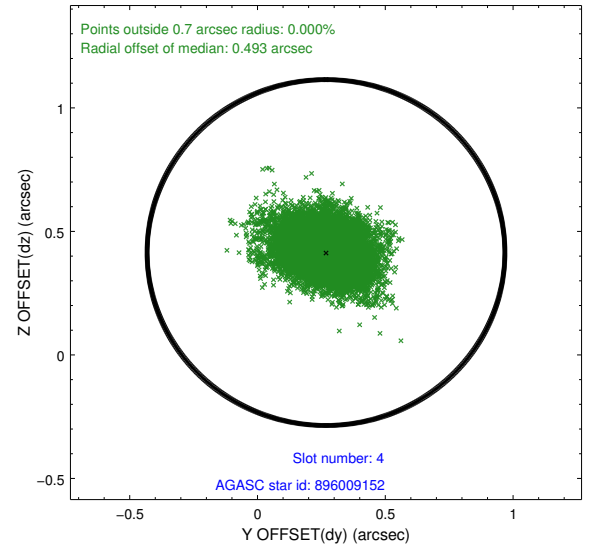
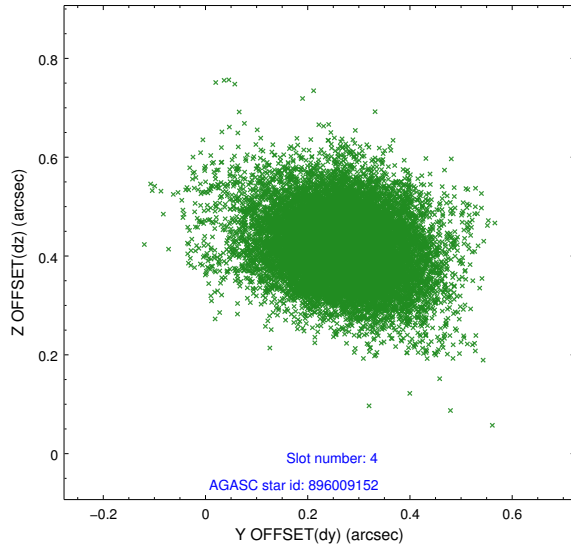
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.09	7360	0.074	0.129	0.010	0.022	0.000000	0.000000	926.88	-1901.44
1	FID		ACIS-S-2	6.98	7361	-0.400	-0.260	0.009	0.019	0.000000	0.000000	-769.46	-1906.37
2	FID		ACIS-S-4	7.08	7361	0.301	0.136	0.006	0.010	0.000000	0.000000	2144.43	2.55
3	GUIDE	used	895489896	7.54	14719	-0.528	-0.586	0.116	0.232	266.605795	-26.200300	1315.31	1324.40
4	GUIDE	used	896009152	7.29	14720	0.268	0.414	0.117	0.203	267.588100	-27.061669	-1618.65	-1990.90
5	GUIDE	used	896013040	7.32	14719	-0.063	-0.243	0.110	0.189	266.506589	-26.972299	-1477.08	1488.62
6	GUIDE	used	896014680	8.71	14702	0.070	-0.102	0.124	0.210	266.460330	-27.216583	-2363.34	1587.51
7	GUIDE	used	896008536	8.58	14710	0.254	0.519	0.115	0.192	267.569332	-27.063788	-1628.62	-1931.31

2.4 Star Slots

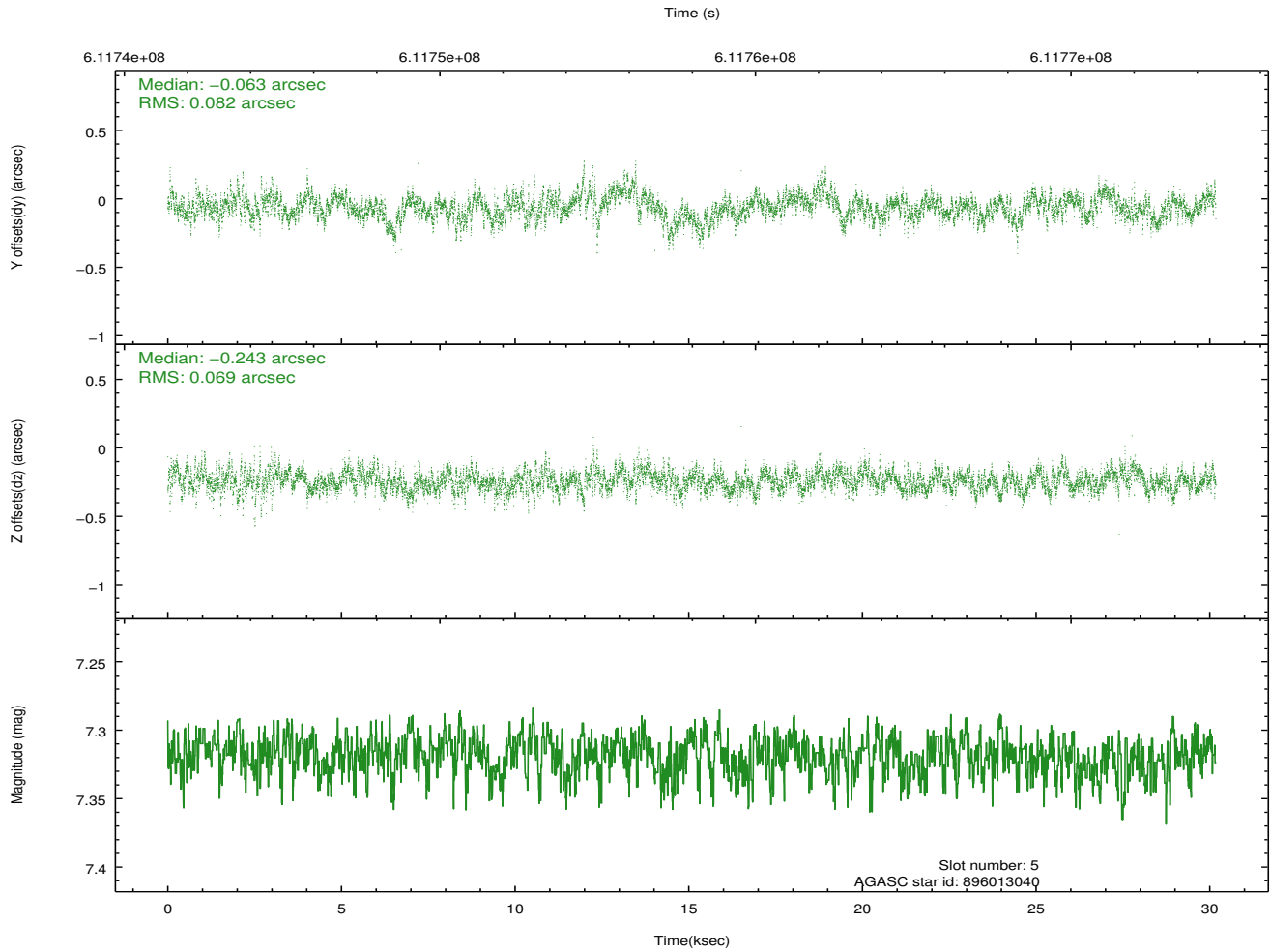
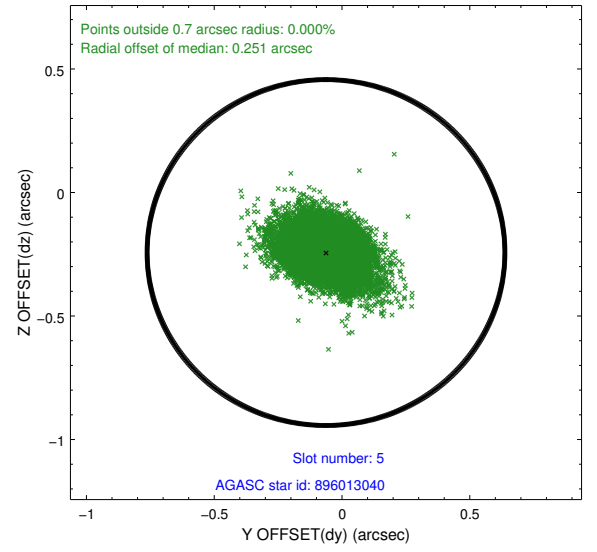
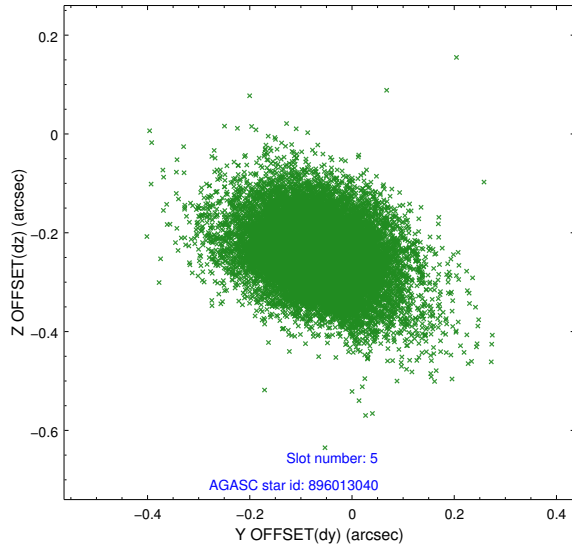
2.4.1 Slot 3



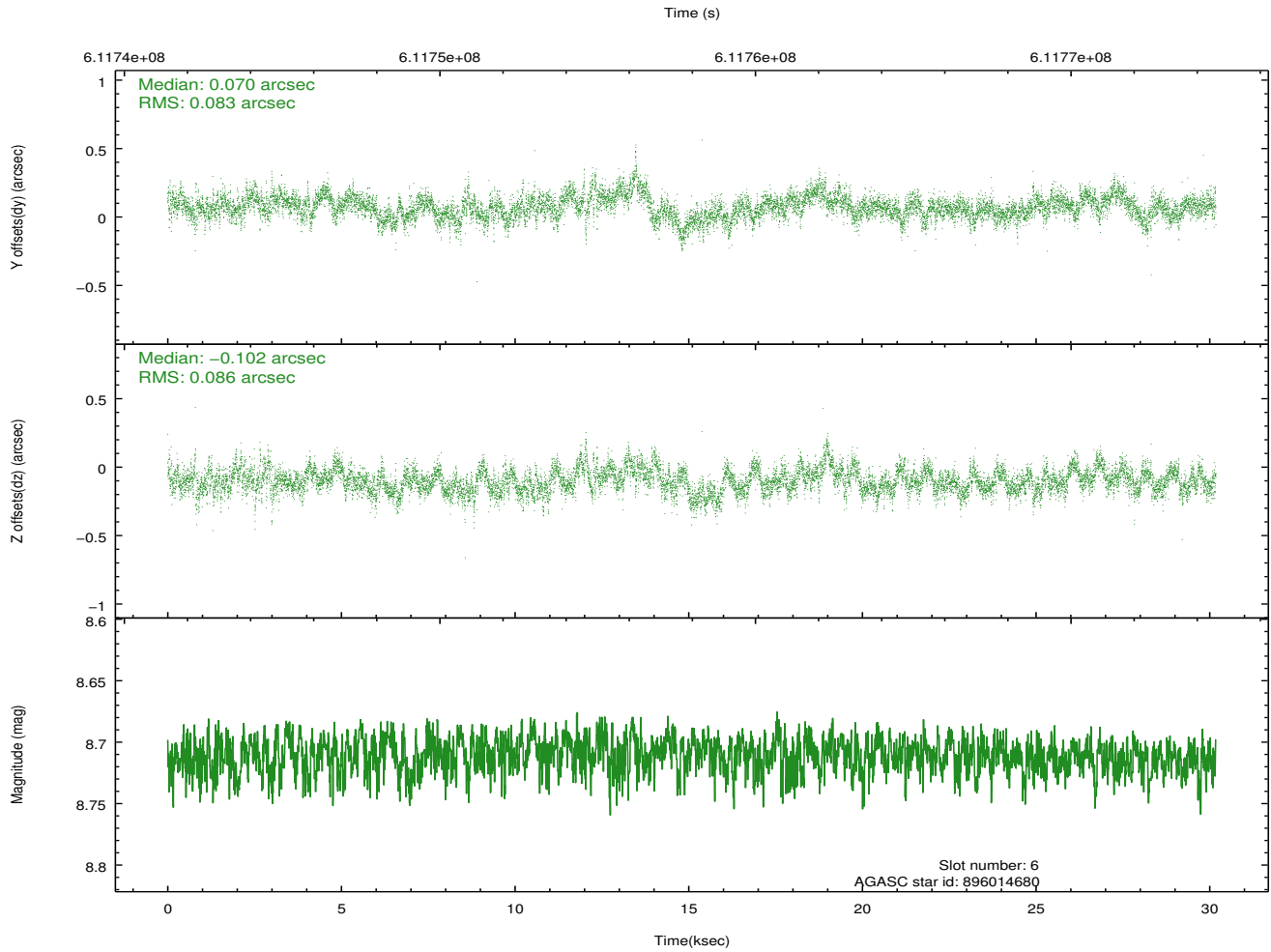
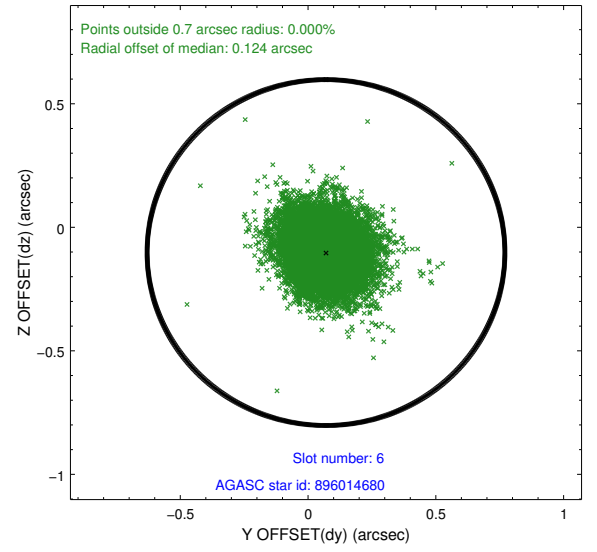
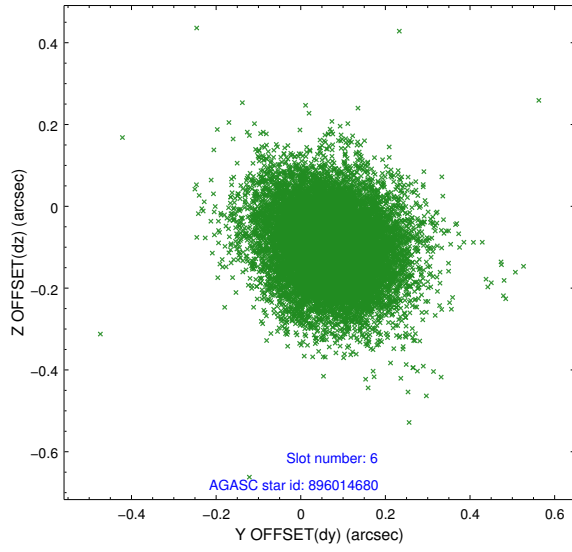
2.4.2 Slot 4



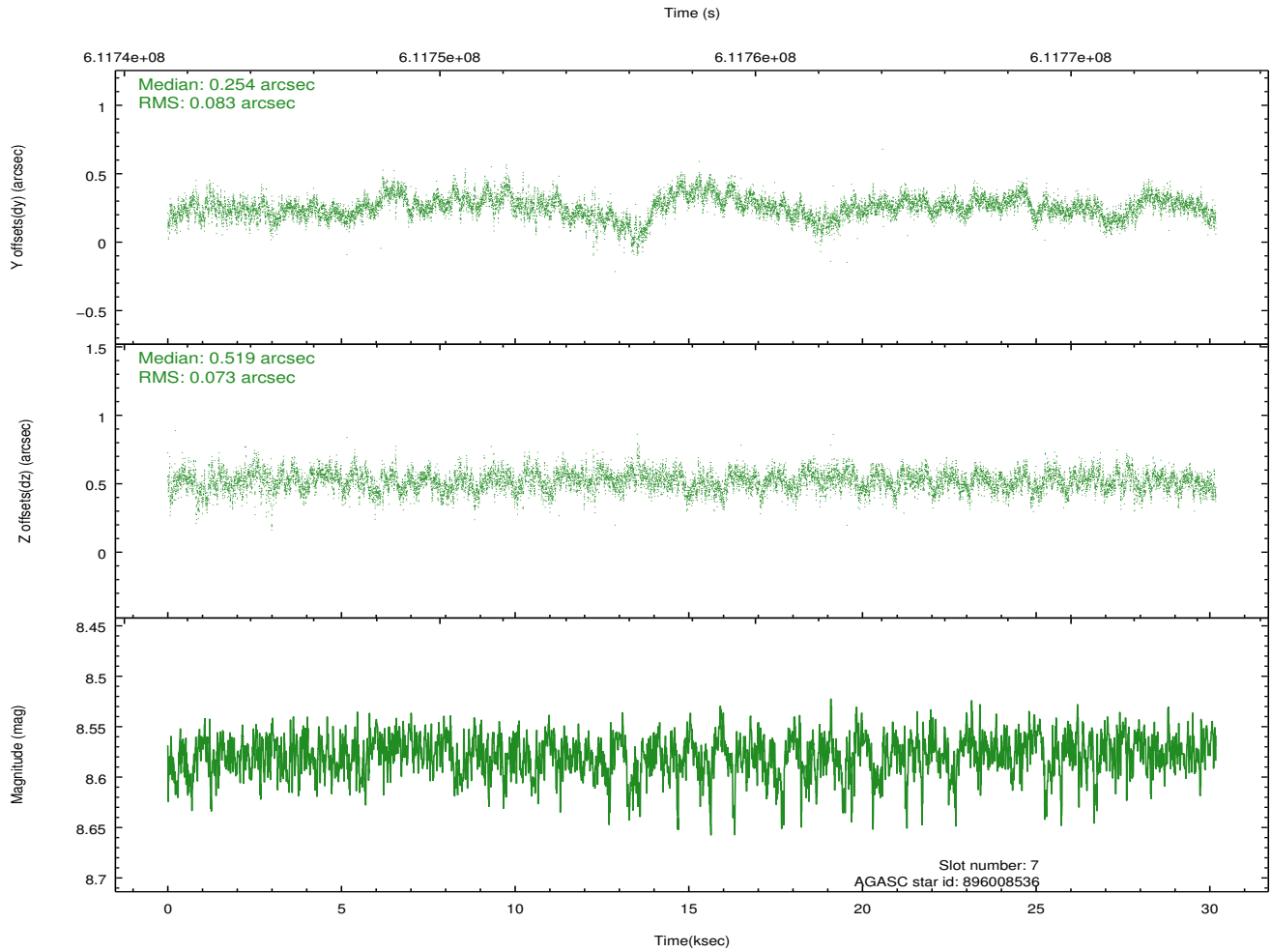
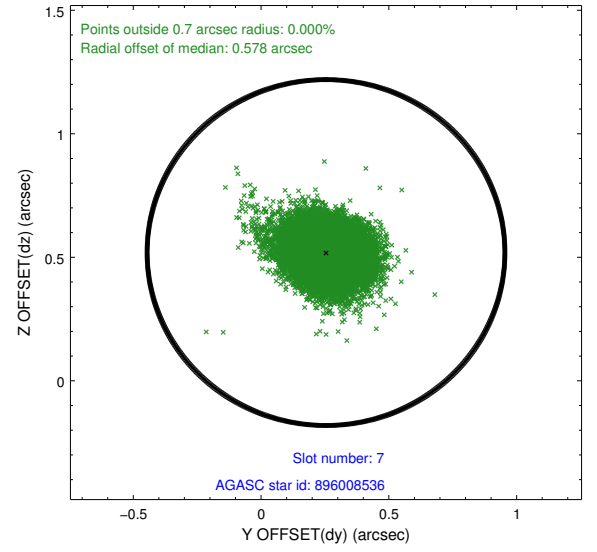
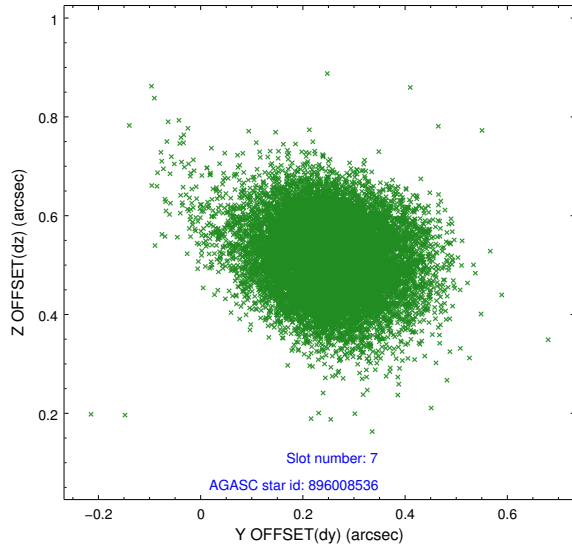
2.4.3 Slot 5



2.4.4 Slot 6

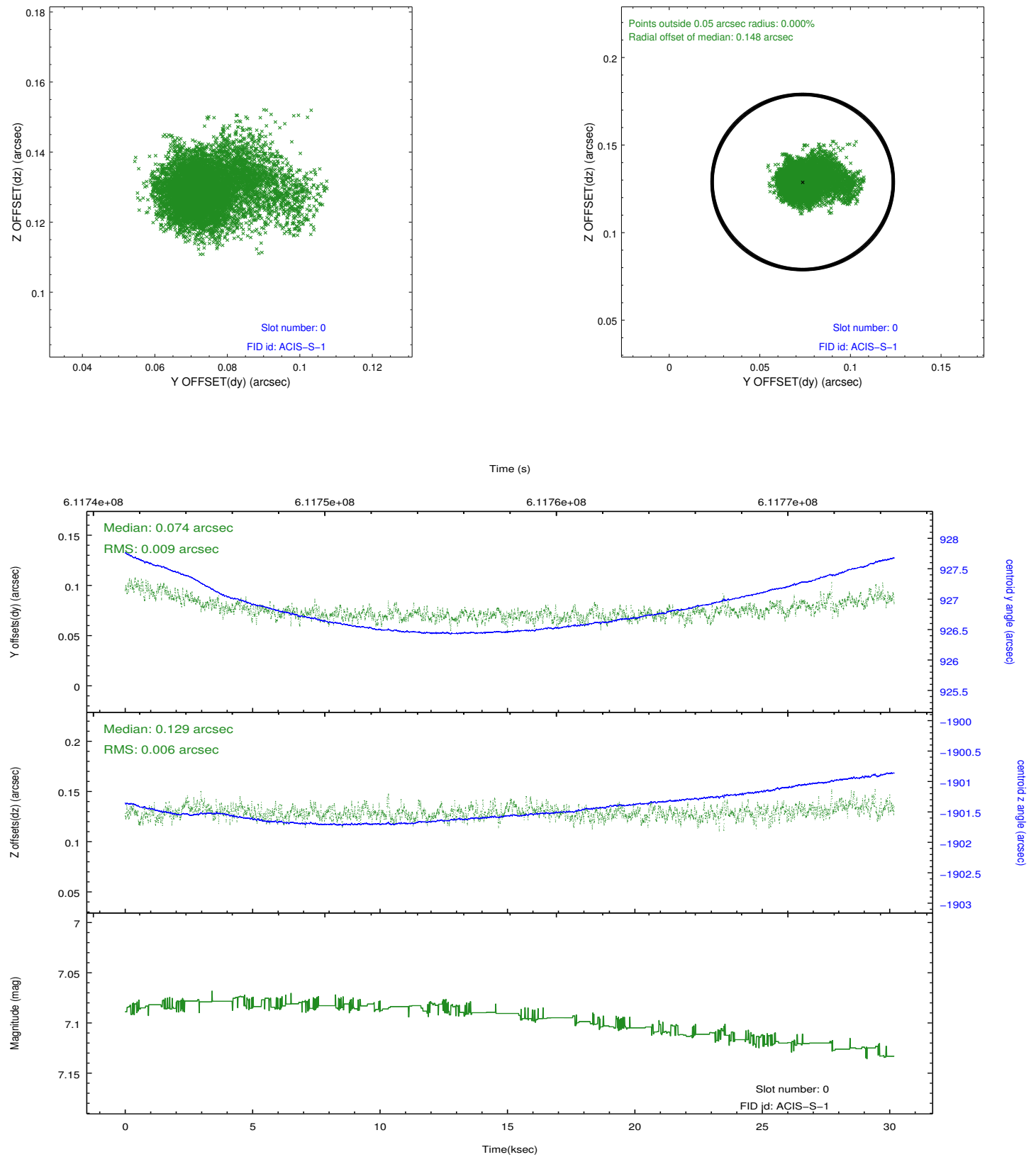


2.4.5 Slot 7

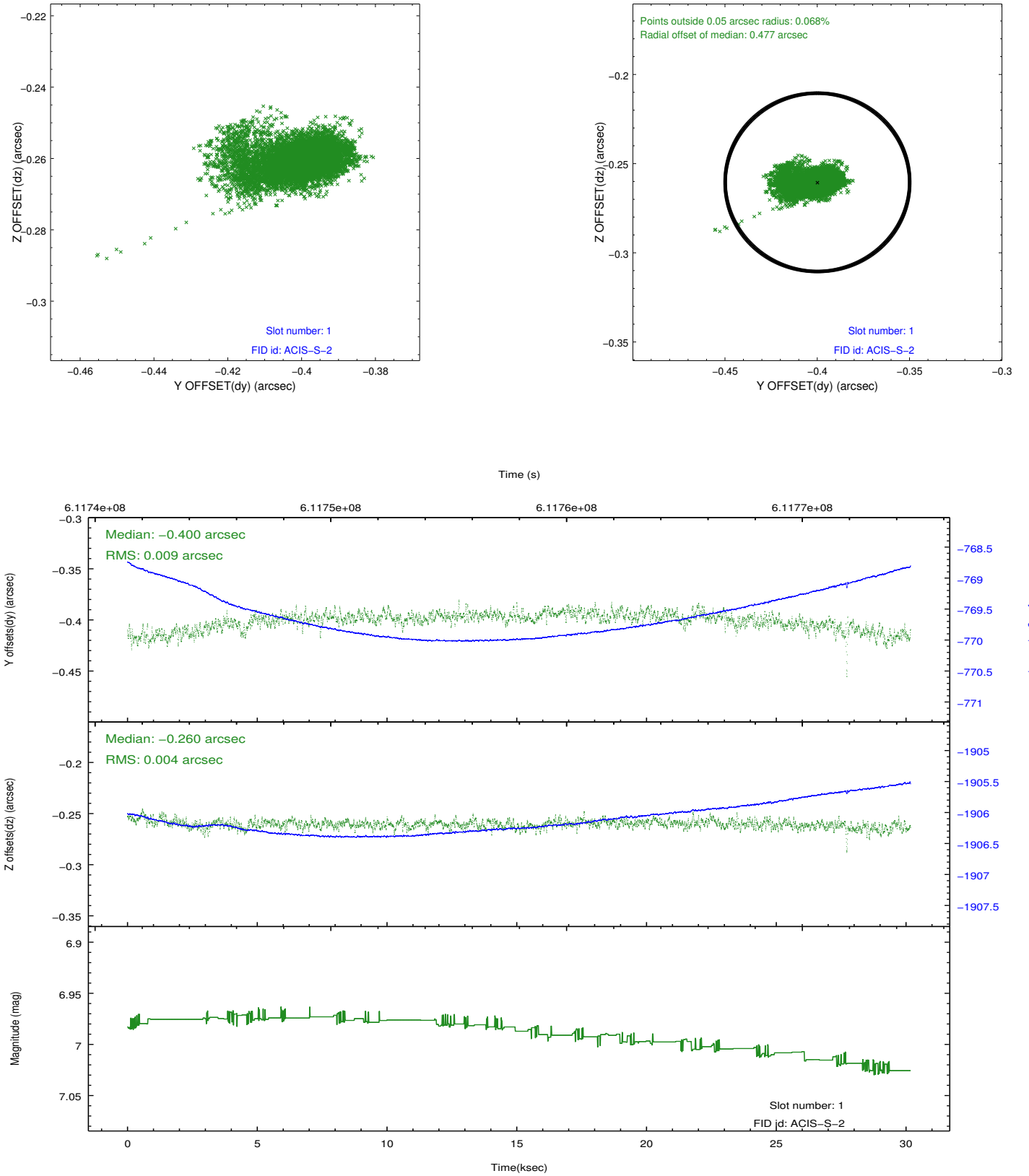


2.5 FID Slots

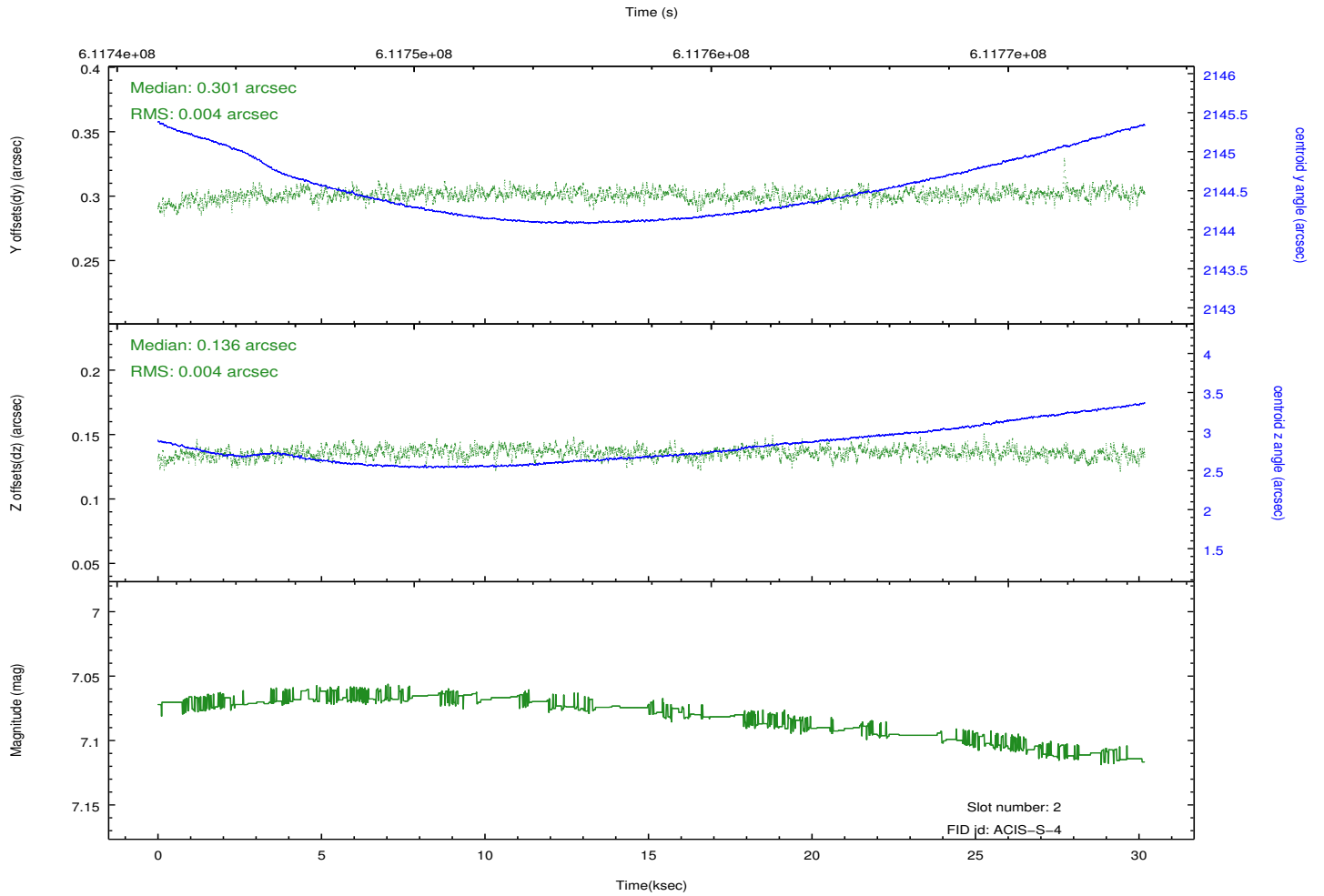
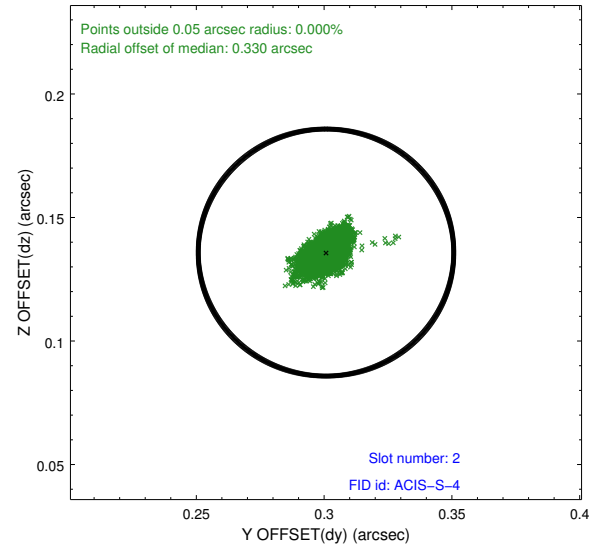
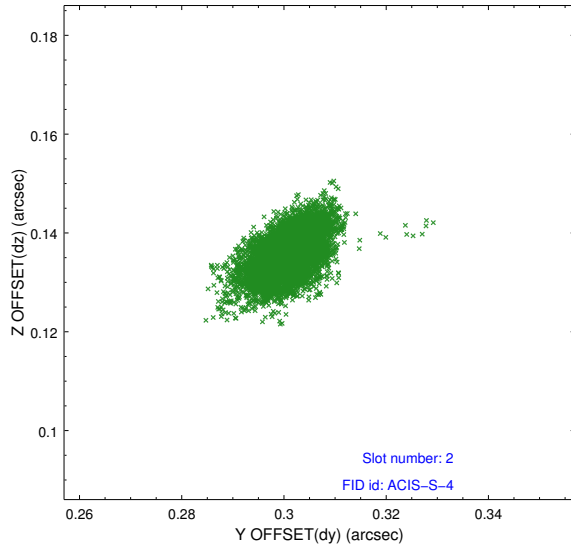
2.5.1 Slot 0



2.5.2 Slot 1

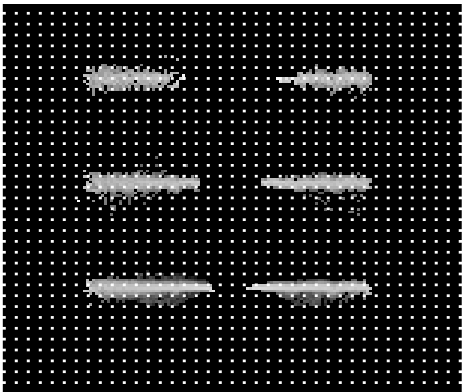


2.5.3 Slot 2

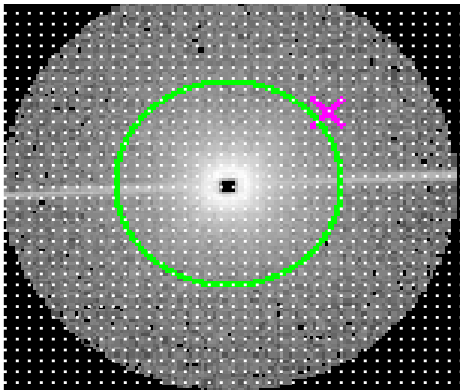


3 Gratings

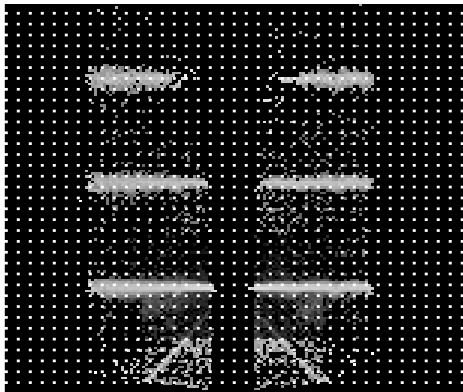
3.1 HEG Arm



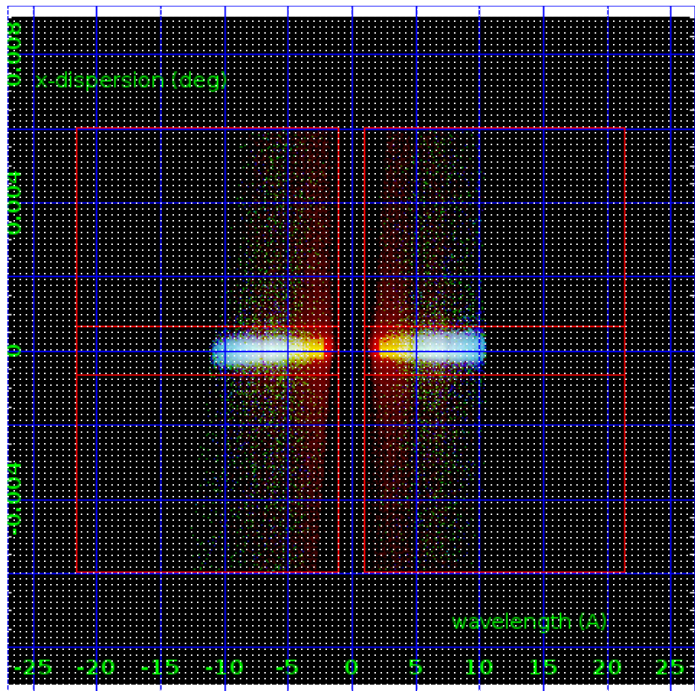
HEG Order Sort 123



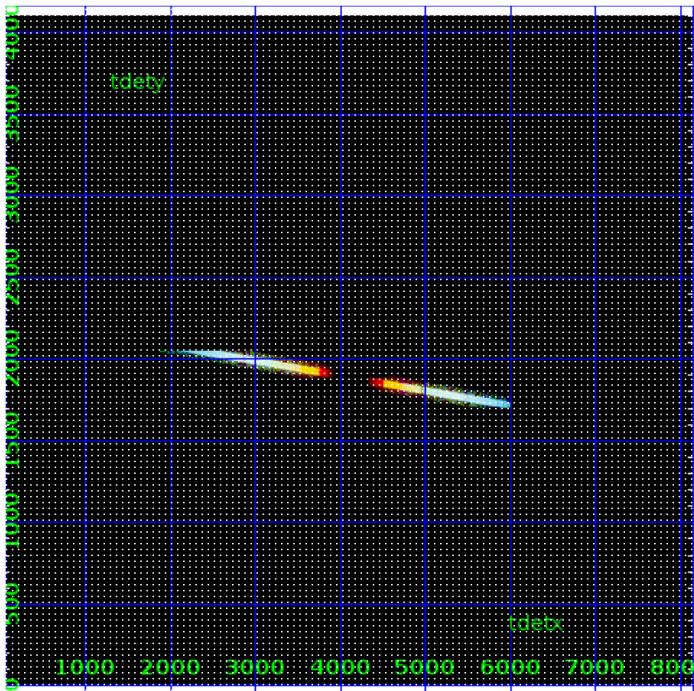
HEG Zero Order



HEG Order Sort ALL

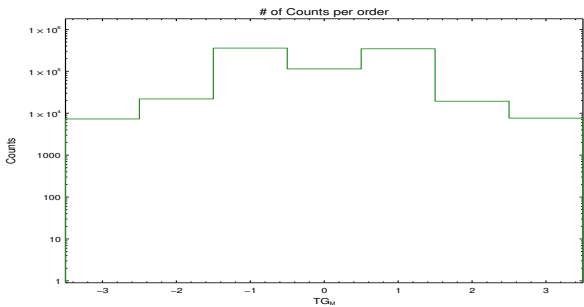


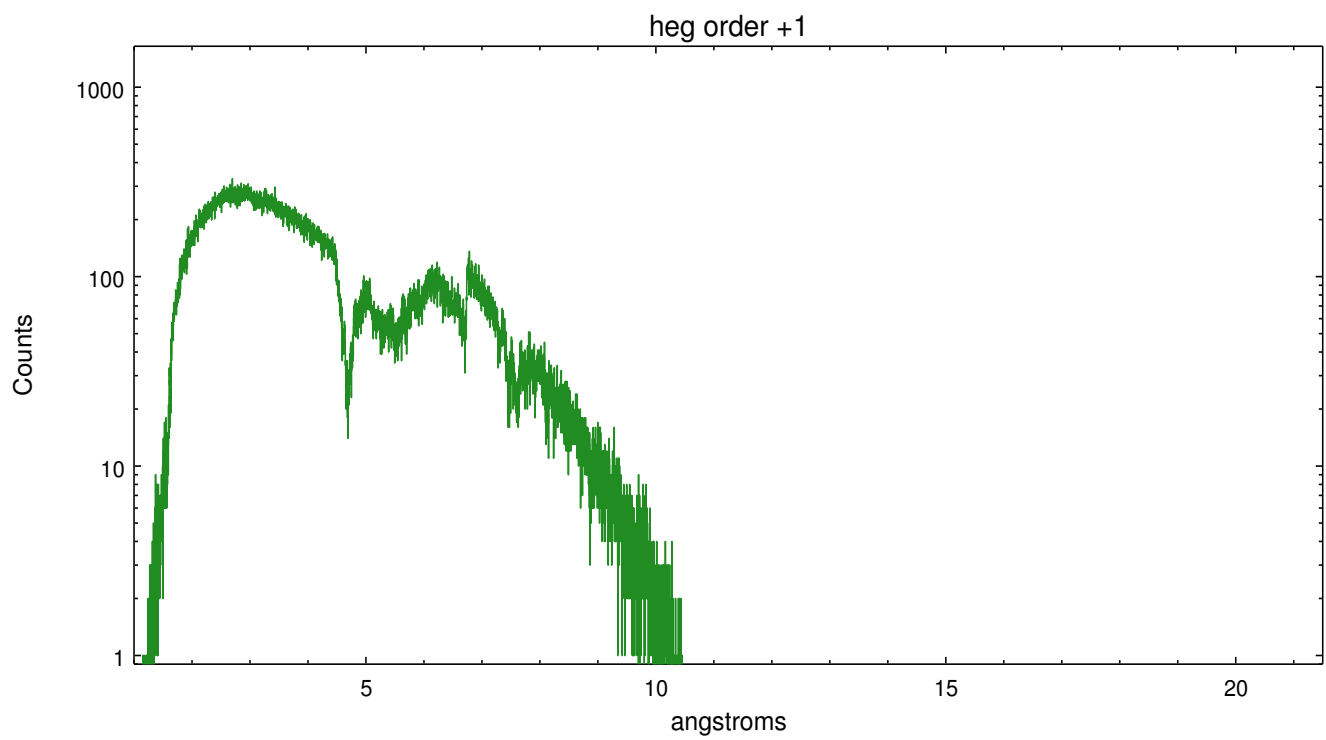
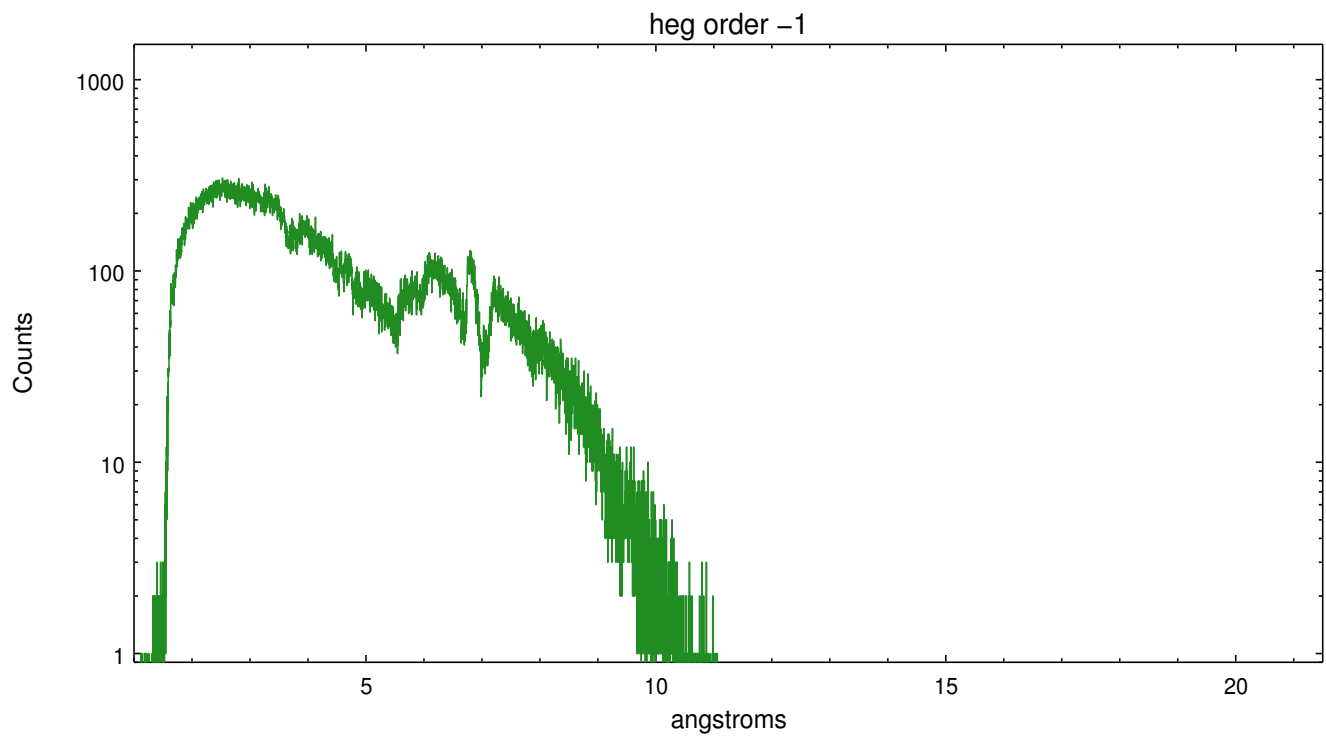
Spot Image HEG



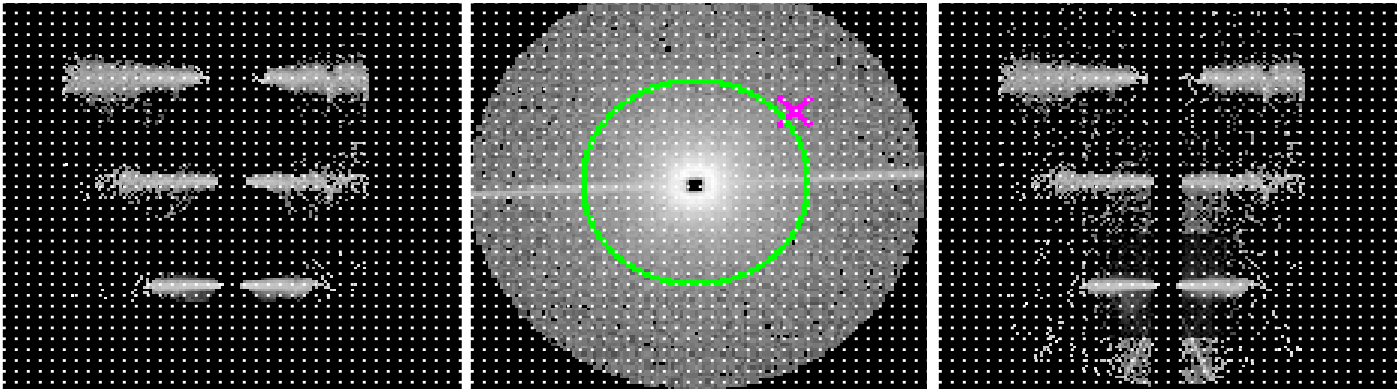
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	7294	21933	357870	114046	344228	19326	7619





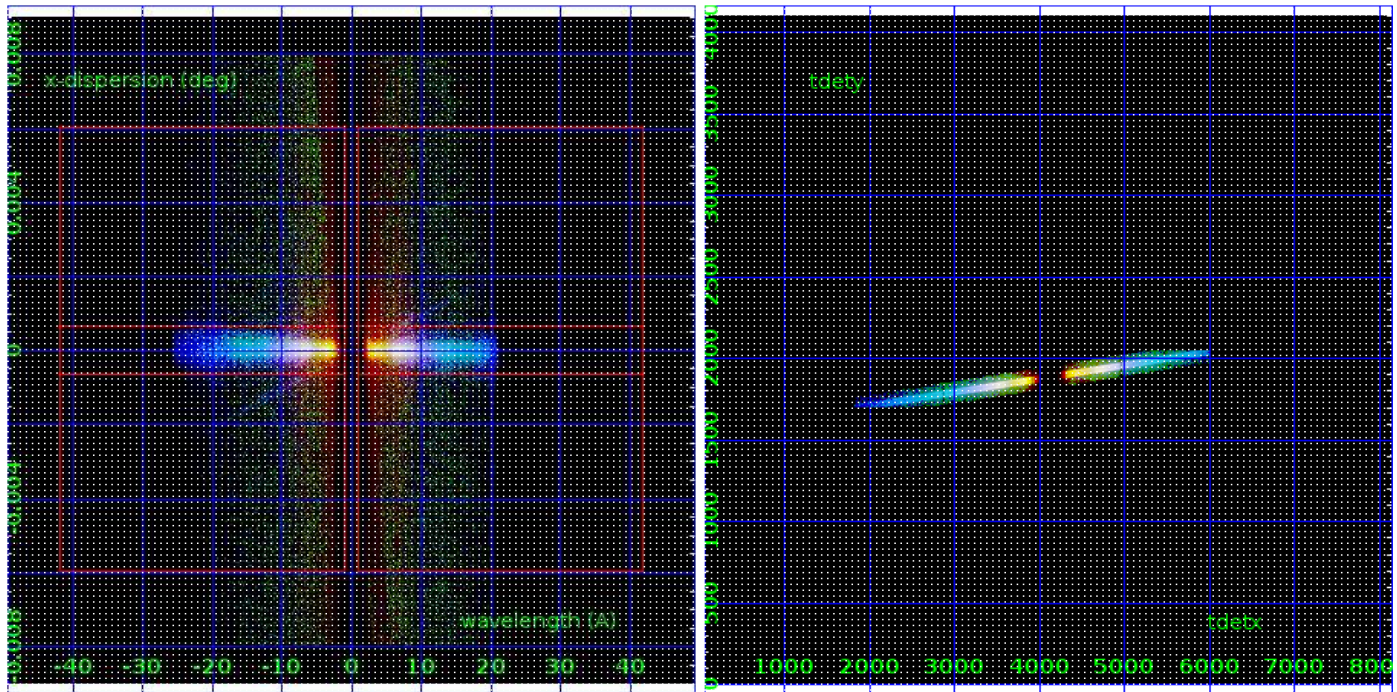
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

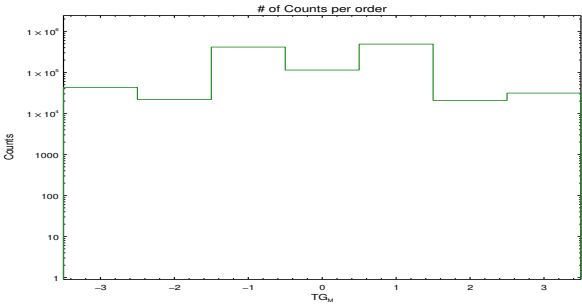
MEG Order Sort ALL

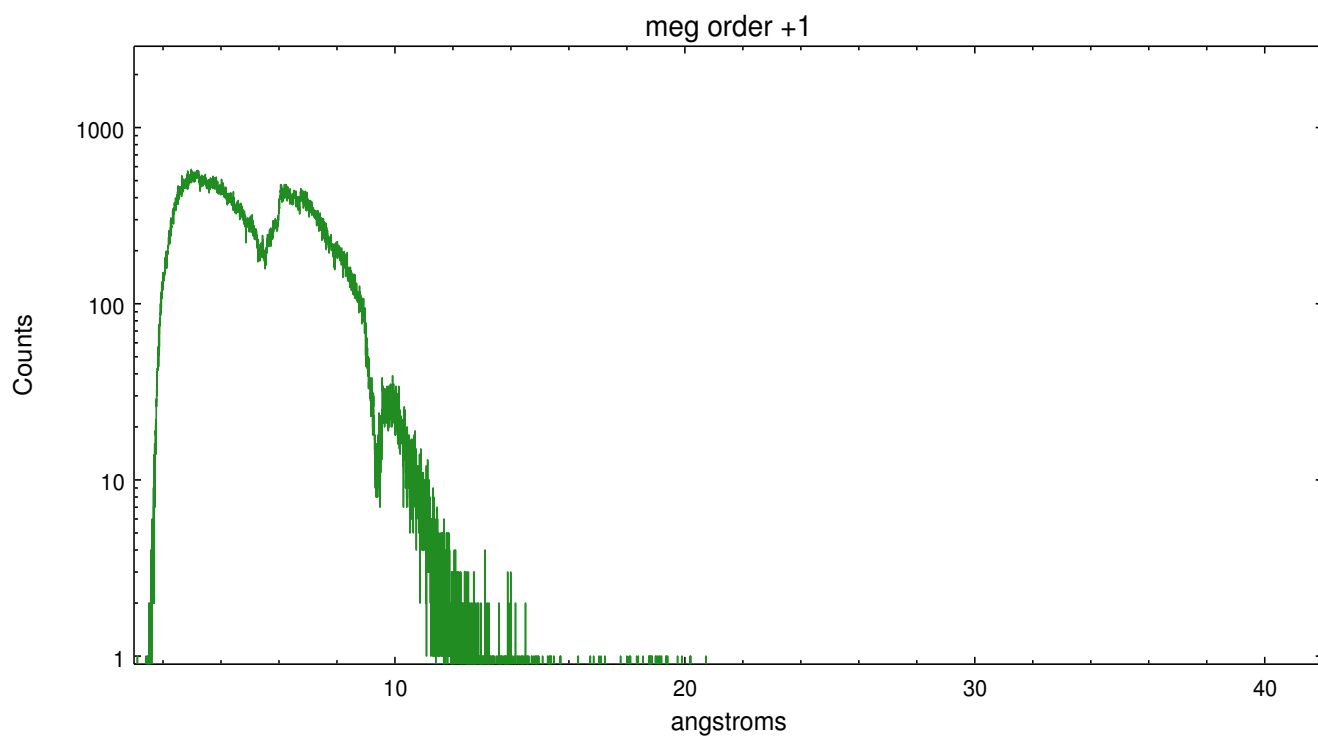
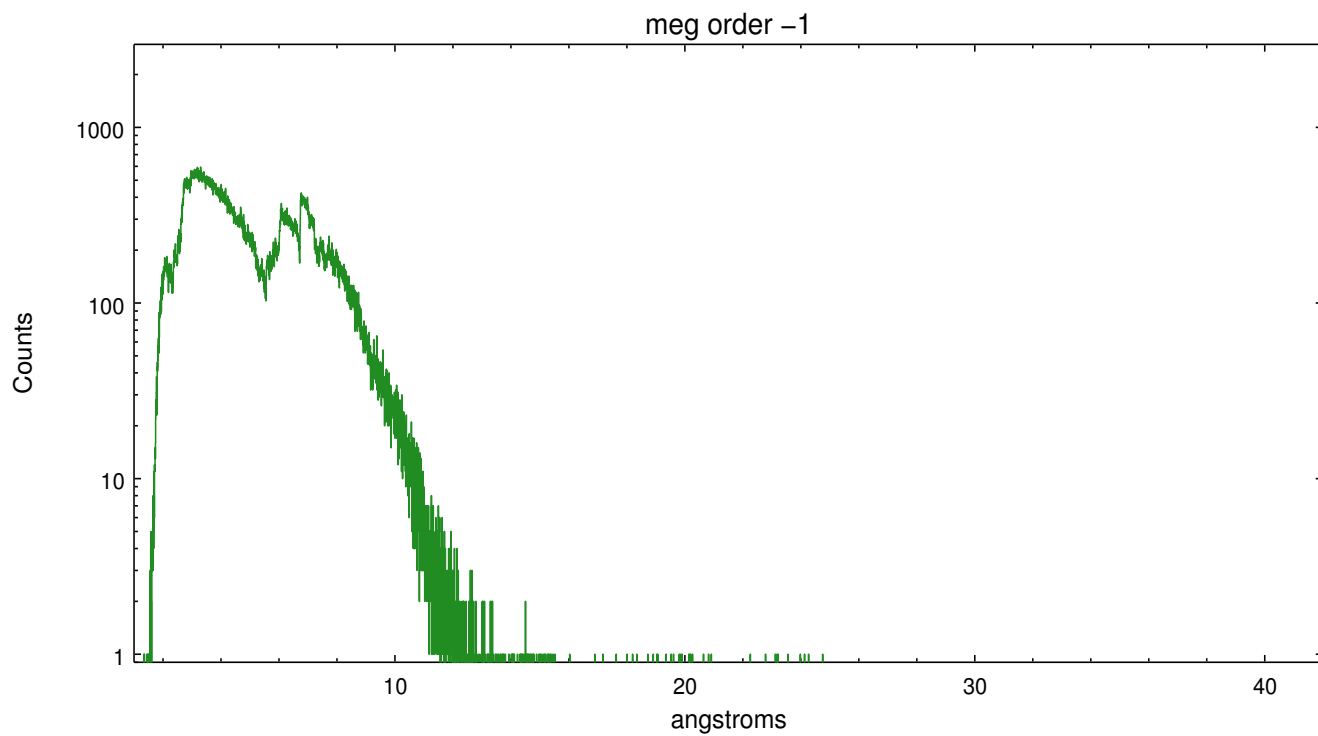


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	43133	21874	414365	114046	489484	20757	31346





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2017.05.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.07920119524

A.2 Comments